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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-----------------------------|------------------|
| 10/807,509 | 03/24/2004 | Kenichiro Uchida | 50395-262 | 3380 |
| 7590 | 03/14/2006 | | | |
| MCDERMOTT, WILL & EMERY 600 13th Street, N.W. Washington, DC 20005-3096 | | | EXAMINER KIANNI, KAVEH C | |
| | | | ART UNIT 2883 | PAPER NUMBER |

DATE MAILED: 03/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/807,509

Applicant(s)

UCHIDA, KENICHIRO

Examiner

Kianni C. Kaveh

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 6-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 11-14 is/are rejected.
- 7) ☒ Claim(s) 2-5 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.



DETAILED ACTION

Applicant's election without traverse of claims 1-5 and 10-14 in a paper submitted on 1/3/06 is acknowledged. The requirement is still deemed proper and is therefore made FINAL.

Allowable Subject Matter

Claims 2-5 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 2-5 allowable because the prior art of record, taken alone or in combination, fails to disclose or render obvious a thermistor disposed immediately by said laser diode on said peltier device, said thermistor monitoring said temperature of said laser diode in combination with the rest of the limitations of the base claim.

Claim 10 is allowable because the prior art of record, taken alone or in combination, fails to disclose or render obvious wherein said heater is a thin film heater in combination with the rest of the limitations of the base claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miguelez et al. (US 20030072337).

Regarding claim 1, Miguelez teaches a light-transmitting module (shown in at least fig. 1, 3 and 5), comprising:

a light-emitting module including a peltier device and a laser diode 402 mounted on said peltier device (see fig. 4-5, item laser module on a peltier device),

said peltier device controlling a temperature of said laser diode (see at least parag. 0035);

a circuit board for installing a plurality of electronic elements (see fig. 5, item circuit board); a heater disposed so as to heat up said light-emitting module and said circuit board (shown in fig. 5, item peltier device heats/cools the laser module and its surrounding environment that includes the circuit board; see parag. 0035); a housing for receiving said light-emitting module, said substrate and said heater therein (shown in at least fig. 3).

However, Miguelez does not explicitly state that the above circuit board is a substrate.

It is obvious/well-known to those of ordinary skill in the art when the invention was made to a circuit board for supporting electronic/optical elements is/known as a substrate since such configuration of the optoelectronic system provided monitoring means to monitor the light emitting modules thermal condition (see parag. 0018).

Regarding claims 11-14, Miguelez further teaches wherein said plurality of electronic elements includes a laser diode controller, a Peltier controller, and a heater controller (see at least fig. 2, item laser controlling circuit and fig. 4-5 controllers for the peltier and heater, also at least parag. 0034) wherein said laser diode controller controls said laser diode such that an optical output of said laser diode is maintained to be a predetermined value (see at least abstract); wherein said heater controller compares an ambient temperature to a preset temperature of said laser diode and, when said preset temperature is higher than said ambient temperature, enables said heater (see at least parag. 0038); wherein said Peltier controller controls said Peltier device so as to set said laser diode to be a preset temperature (see parag. 0013 and 0039).

Citation of Relevant Prior Art

Prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In accordance with MPEP 707.05 the following references are pertinent in rejection of this application since they provide substantially the same information disclosure as this patent does. These references are:

Miguelez et al. 6865199

Nakamori et al. 5488625

Shiga 5033809

Masuko et al. 5214660

Karger et al. 20030034450

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These references are cited herein to show the relevance of the apparatus/methods taught within these references as prior art.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Cyrus Kianni whose telephone number is (571) 272-2417.

The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 6:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font, can be reached at (571) 272-2415.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9306 (for formal communications intended for entry)

or:

Hand delivered responses should be brought to Crystal Plaza 4, 2021 South Clark Place, Arlington, VA., Fourth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-0956.

March 9, 2006

**KAVEH KIANNI
PRIMARY EXAMINER**